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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/829,709	04/10/2001	David L. Anglin	08935-240001 / M-4931A	1782
26161	7590	08/25/2005	EXAMINER	
FISH & RICHARDSON PC			MERCADO, JULIAN A	
P.O. BOX 1022			ART UNIT	
MINNEAPOLIS, MN 55440-1022			PAPER NUMBER	

1745

DATE MAILED: 08/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/829,709

Applicant(s)

ANGLIN, DAVID L.

Examiner

Julian Mercado

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-5,7-31,33-36,39-41 and 43-56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,7-31,33-36,39-41 and 43-56 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 27, 2005 has been entered.

Claims 1, 3-5, 7-31, 33-35, 36, 39-41 and 43-56 are pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-5, 7-10, 16-19, 30, 33, 42-45 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Friend (EP 0 962 997 A1) in view of Adams (U.S. Pat. 4,177,157).

Claims 11, 12 and 35-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Friend in view of Adams, and further in view of Andersen (U.S. Pat. 4,948,484).

Claims 13-15, 20-22, 39-41, 46-48 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Friend in view of Adams, and further in view of Yagi (U.S. Pat. 4,923,637).

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Claims 23 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Friend in view of Adams and Yagi, and further in view of Lafdi and Wright. (Carbon Fibers from Handbook of Composites, 1998)

Claim 26 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Friend in view of Adams, and further in view of Singer (U.S. Pat. 4,005,183)

Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Friend in view of Adams, and further in view of Lafdi and Wright and Singer.

Claims 24, 25, 50 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Friend in view of Adams, and further in view of Glasgow et al. (U.S. Pat. 6,506,355)

Claims 27 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Friend in view of Adams, and further in view of Mototani et al. (U.S. Pat. 5,482,798)

Claims 28 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Friend in view of Adams, and further in view of Chalilpoyil et al. (U.S. Pat. 4,777,100)

Claims 29 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Friend in view of Adams and Chalilpoyil et al., and further in view of Callahan et al. (U.S. Pat. 6,287,730 B1)

The above rejection(s) are maintained for the reasons of record. The examiner notes the present amendment to the claims which now recite an active material of between about 6% and about 10% of carbon fibers by weight, a feature which appears to have been previously considered as recited in claims 2, 32 and 38 (claims of which are correspondingly canceled).

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Applicant's arguments have been fully considered, however they are not found persuasive. Applicant cites a portion of Adams as allegedly teaching "at best about 11.5%-15% or 10.5% of carbon fibers by weight." (Remarks on page 9) This argument is not found persuasive. The cited portion by applicant appears to be drawn from column 4 line 28 et seq. which recites that "[t]he graphite therein is preferably in both the powdered and fibrous form (i.e. about 0.5 mm long), there being *about half again* as much powdered graphite (i.e. by weight) as there is fibrous graphite..." (emphasis added)

The disclosed range by Adams is about 23% to 30% by weight. Taking the lower end of that range, given that Adams also discloses that the powdered graphite is present "about half again", algebraically powdered graphite would be represented as 1.5x while fibrous graphite is equal to x. Thus:

$$x + 1.5x = 23\%$$

$$2.5x = 23\%$$

$$x = 9.2\% \text{ fibrous graphite}$$

Thus, 9.2% fibrous graphite is considered to teach or at least suggest the claimed 6% to about 10% carbon fibers by weight.

Additionally, Adams teaches by way of example 10.5% graphite fibers in column 5 line 3. 10.5% is considered readable on applicant's claimed range of "about 10%." Notwithstanding, using the conventional rounding rule for when values are exactly x.5 (x = an integer value), 10.5% rounds *down* to the closest even number of 10, which is considered to read on the claimed about 10% carbon fibers by weight.

The examiner notes that arguments against the secondary references appear to be directed to these references failing to remedy alleged differences between Adams and the present claims.

Information Disclosure Statement

Applicant's request for consideration of the Information Disclosure Statements (IDSs) filed 10 April 01, 1 June 01, 27 August 01 and 16 March 01 is acknowledged. The examiner notes, however, that all four of these IDS statements have already been considered and made of record in the file as an attachment to the 21 December 04 Advisory Action.

Conclusion

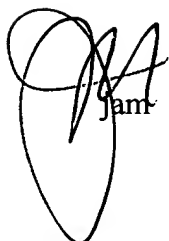

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian Mercado whose telephone number is (571) 272-1289. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan, can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

A handwritten signature in black ink, consisting of a large, stylized 'A' or 'M' shape with a loop at the bottom. The word 'jam' is written in small letters below the signature.A handwritten signature in black ink, consisting of a stylized 'P' or 'R' shape with a long horizontal stroke extending to the right.

PATRICK JOSEPH RYAN
SUPERVISORY PATENT EXAMINER